ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENGINEERING STATEMENT

This engineering exhibit, of which this statement is a part, was prepared in accordance with the Rules and Regulations of the Federal Communications Commission and pursuant to the provisions of Section V-B of FCC Form 301 on behalf of PROFESSIONAL BROADCASTING CORPORATION (hereafter PBC) in support of an application for authority to construct an FM broadcast facility operating on channel 250 (97.9 Mhz) at WHITESBORO, NEW YORK. The effective radiated power proposed is 1.5 KW, both in the horizontal and vertical plane, and the antenna center of radiation is 204 meters. This power/height combination is a maximized class A facility permitted under the current rules and regulations.

Notification of the proposed tower construction location has been made to the Eastern Regional office of the FAA an a determination of no hazard has been issued. Engineering specifications for the major aspects of the proposed tower are included in figure E-2.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

PROPOSED TRANSMITTER AND STUDIO LOCATIONS

PBC proposes to operate from a site uniquely described by the geographic coordinates:

(NAD 27) 43° 02' 14" North Latitude 75° 26' 40" West Longitude

(NAD 83) 43° 02' 14" North Latitude 75° 26' 39" West Longitude

Figure E-4 is a portion of the Clinton, New York 7.5 minute U.S.G.S. topographic quadrangle map showing the proposed transmitter site. PBC proposes to co-locate with radio stations WKDY, WFRG and WFXV(TV). PBC assumes responsibility for any intermodulation or objectionable interference and will correct any such problems should they arise.

Because the area is rural, there is not expected to be any problem with blanketing interference. The applicant is aware of the provisions of Section 73.318 of the FCC's Rules and the requirement for satisfying all complaints of blanketing interference that are received within a one-year period.

The main studio for the station will be located in the WHITESBORO area, at a site yet to be determined.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

COVERAGE CONTOURS

The three-to-sixteen-kilometer average terrain elevations were derived from the National Geophysical Data Center (NGDC) 30-second topographic data base. However, the site elevation was determined from the U.S.G.S. 7.5 minute Clinton topographic quadrangle map.

The effective antenna radiation center height for each of the eight standard 45-degree spaced radials and for the radial through the principal community was used in conjunction with the F(50,50) metric curves of Figure 1 of Section 73.333 of the Rules to determine the distances to the 70 dBu and 60 dBu coverage contours. The contours drawn from the data are depicted on the map in figure E-5. As is readily evident, all of WHITESBORO, NEW YORK is included within the proposed 70 dBu coverage contour as required by the rules.

POPULATION AND AREA DATA

Based on the 1990 U.S. Census of Population, the number of persons enclosed by the proposed 60 dBu coverage contour is 263,543 persons. The population count was made through the employment of a computer program containing a data base including the geographic coordinates of the centroids of population groupings. The area within the proposed 60 dBu coverage contour is 2,561 square kilometers. This area was determined by a computerized integration program.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ALLOCATION CONSIDERATIONS

A review of allotments and assignments on channel 250, on the three immediately upper adjacent, the three immediately lower adjacent channels, and on channels 197 and 196 (53 and 54 channels removed from channel 250), included as Engineering Exhibit E-7, showed that the site proposed would not be in accordance with section 73.207 of the FCC Rules.

Engineering Exhibit E-7 shows the channel allocation study based on PBC's proposed site. The allocation study shows a short spaced condition with radio station WPXY at Rochester, NY. Please see Engineering Exhibit E-8 for an explanation of this short spaced condition. As a result of the short spaced condition, processing pursuant to FCC Rule Section 73.215 is required. Utilization of a directional antenna will not be required. PBC hereby requests processing under FCC Rule Section 73.215.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS

The instant proposal is categorically excluded from environmental processing since none of the conditions of Section 1.1306(b)(2) and (3) would be involved for the following reasons:

- 1. The site proposed is not in or near any location referenced in Section 1.1306(b)(1) as being of environmental interest.
- 2. The provisions of Section 1.1306(b)(2) relating to the use of high intensity strobe lighting does not apply since the antenna height proposed with this application does not require this form of lighting to be utilized.
- 3) Compliance to Section 1.1306(b)(3) regarding human exposure to RF radiation was examined for multiple sources. A search was made about the proposed site coordinates to locate any additional sources of RF radiation. Radio stations WKDY, WFRG and WFXV(TV) are the only other contributing sources.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS CONTINUED

The proposed antenna will be mounted on an existing tower with FM stations WKDY and WFRG. WKDY is licensed for 27KW Effective Radiated Power (ERP). WFRG is licensed for 7.4 KW ERP. In order to calculate the power density taking into account all FM sources, it will be assumed that the three radiation sources are located at the lowest antenna height and their contributions are additive for a worst case analysis. The antenna for WFRG is located nearest the ground at a height of 39 meters. The total radiated power from the three sources is 71.8 KW.

Referring to Table 1, Appendix B of OST Bulletin No. 65, and assuming a worst case analysis by using a 2 bay antenna, the minimum height required for compliance with ANSI exposure guidelines is 23.6 meters (read from the 75 KW row). Since the nearest antenna is actually 39 meters above ground, the proposed FM contribution to the ANSI limit is within guidelines.

Television station WFXV is located 53 meters above ground with 42.7 KW ERP. Utilizing equation 5 in OST Bulletin No. 65 with the values listed below, the power density can be found to be 0.315 mW/cm², or 16 percent of the ANSI limit of 1.957 mW/cm² for this frequency range.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS CONTINUED

VERP = 42.7 KW AERP = 0.22*VERP D = 53 meters pi = 3.14 F = 1 (worst case)

Adding the contributions of FM and TV fields the value should be less that 100 percent. The percentage of the FM contribution to the total field is 37 percent (the square of the ratio of the minimum height to the actual height). Adding this to the 16 percent due to the WFXV's contribution, the total exposure is 53 percent of the ANSI limit.

Access to RF circuitry will be restricted. Signs will be posted warning of the potential danger. When persons require access to the site, tower or antenna for maintenance purposes, the transmitter power will be reduced or completely eliminated to comply with ANSI guidelines. PBC will come to agreement with all licensees located at the proposed site to coordinate maintenance activities. Hence, the conditions of Section 1.1306(b)(3) would not be involved.

CONSULTING COMMUNICATIONS ENGINEERS

1306 W. County Road F, St. Paul, MN 55112 (612) 631-1338 • Fax (612) 631-3502

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

CONCLUSIONS

Based on the engineering studies provided, the following conclusions can be obtained:

- (1) Implementation of the instant proposal will provide WHITESBORO with a full time aural broadcast service.
- (2) 263,543 persons in 2,561 square kilometers would have an available signal strength of 60 dBu or greater from the proposed construction location.
- (3) All of WHITESBORO would be served with a signal of 70 dBu or greater from the proposed construction site.
- (4) The proposal is in complete conformance with all technical rules of the Federal Communications Commission.

REGISTERED
PROFESSIONAL
ENGINEER
15305

Garrett G. Lysiak, P.E.

Sanut D. Garal

January 26, 1994

				FOR COMMISS	Sion use only	
				File No.		
Section	Section V-B - FM BROADCAST ENGINEERING			ASB Referral	Date	
		•		Referred by		
Name of Appl	licant					
Call letters (if	isseedi	is this app	lication beli	ng filed in resp	conse to a	Yes X No
N/A		window? If Yes, spec	oify olosing	date:		
urpose of A	pplication: (check appro	opriato besies);				
X Const	ruct a new (main) fe	ollity	Со	nstruct a new s	Luxiliary facility	· •
Modif	'y existing constructi	ion permit for main	☐ Mo	dify existing o	onstruction peri	mit for auxiliary
Modif	y licensed main faci	lity	Mo	dify licensed a	uxiliary facility	
f purpose is a	to modify, indicate b	elow the nature of char	nge(s) and s	pecify the file	number(s) of th	e authorizations
Anter	nna supporting-struct	ure height	X Er	Pective radiated	i power	
X Anter	nna height above ave	erage terrain	☐ Pro	quency		
Anter	ina location		Cle	196		
Main	Studio location		Oth	MOT (Summarize br	rioflyi	
Flie Numbe	BPH9205	13M1				
. Allocation:						
Channel No.	Ţ.	rincipal community to b	be served:		Class leheck a	inly one best belock
250	City	County Oneida		State NY		B1
_	Whitesboro	Onerda		NI	☐ C2 ☐	C1 🔲 C
Exact location	on of antenna.					
landmark	-	nd state. If no address, sy	. •	•	_	
4 1 ki	lometers to Fact Hill.	armers Mills, N	Yatal	pearing of	' 111.7 deg	rees atop
b) Geographic	al coordinates (to ne	serest second). If mounte				
•	•	wer location. Specify Soi de will be presumed.	uth Latitude	or East Longit	ude where appli	cable; otherwise,
	•		<u> </u>		۰ ا	l. o
Latitude N	43 0	2 14	Longitud	•₩ 75	26	40
is the supportant		ame as that of another	station(s) or	proposed in an	nother pending	X Yes No
If Yes, give	call letter(s) or file	number(s) or both.		WKDY,WFRG,	WFXV	
if proposal	involves a change i	n height of an existing	structure.	pecify existing	height above er	round level includin
		s, and lighting, if any.		L 4 AUTHING		

Latitude	0	1	•	Longitude	o	
Has the FAA been If Yes, give date a determination, if	and office wit available.	iere notice was	filed and		-	X Yes 1
Date 5/8/92	<u> </u>	Office w	here filed	Eastern Re	egion .	
i List all landing as nearest runway.	reas within 8	km of antenna	site. Specif	y distance and b	earing from stru	cture to nearest point of
· ·	nding Area		Dia	tance (km)	Ве	earing (degrees True)
(a) N/A	· · · · · · · · · · · · · · · · · · ·	-				
(p)						
(a) Elevation: /t/ t	he nearest meter	,				
(1) of site abov	e mean sea le	vel;				420 meters
				noluding antenna	, all other	61 meters
appurtenan	oes, and lighti	ng, if any); an	đ			
(8) of the top of	of supporting	structure above	o mean sea	level [(a)(1) + (a)	X2)]	481 meters
b) Height of radiat	ion center: /	e the nearest we	ter) H = H	orizontal; V - Ver	rtical	_
(I) above groun	nd					58meters (
						58 meters (
(2) above mean	level [(aX1) + (bX1)]				478 meters (
			•			478 meters (
(8) above avers	ego terrain					204 meters (
						204 meters (
Attach as an Exhib in Question 7 abov specify heights ar	e, except item	KbKS). If mou	nted on an	AM directional-a	rray element,	Exhibit No. E-2
Frective Radiated						
(a) ERP in the hori	zontal plane		1.5	_ kw (H*)1	-5 kw (V=)	•
(b) is beam tilt pro	posed?			-		☐ Y 🖛 🗓 No
if Yes, specify vertical elevation	maximum ERF	in the plane o	of the tilted N/A	beam, and attach	/Δ	Exhibit No.
			N/A	_ kw (H*)	kw (V=)	

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 3)

10. is a	directional antenna proposed?	Yes X No
	es, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 78.818, uding plot(s) and tabulations of the relative field.	Exhibit No.
ıı wın	the proposed facility satisfy the requirements of 47 C.F.R. Sections 78.815(a) and (b)?	X Yes No
	o, attach as an Exhibit a request for waiver and justification therefor, including amounts percentages of population and area that will not receive 8.16 mV/m service.	Exhibit No. N/A
	the main studio be within the protected 8.18 mV/m field strength contour of this cosal?	X Yes No
ir n	o, attach as an Exhibit justification pursuant to 47 C.F.R. Section 78.1126.	Exhibit No. N/A
18. (a) I	Does the proposed facility satisfy the requirements of 47 C.F.R. Section 78.207?	Yee X No
(p) I	f the answer to (a) is No, does 47 C.F.R. Section 78.218 apply?	Yes X No
	of the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.	Exhibit No. N/A
	if the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement escribing the short spacing(s) and how it or they aross.	Exhibit No.
٥	if authorization pursuant to 47 C.F.R. Section 78.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:	Exhibit No.
	Display the proposed operation of the proposed operation. 2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.	
	3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur. 4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.	
Ct	5) The official title(s) of the map(s) used in the exhibits(s).	
trans the l head	there: (a) within 60 meters of the proposed antenna, any proposed or authorized PM or TV smitters, or any nonbroadcast (escept citizens bend or eneteer) radio stations; or (b) within blanketing contour, any established commercial or government receiving stations, cable lend facilities, or populated areas; or (c) within ten (i0) kilometers of the proposed nna, any proposed or authorized PM or TV transmitters which may produce ever-induced intermodulation interference?	X Yœ □ No
rėme elimi other	es, attach as an Exhibit a description of any expected, undesired effects of operations and idial steps to be pursued if necessary, and a statement accepting full responsibility for the nation of any objectionable interference (including that caused by receiver-induced or types of modulation) to facilities in existence or authorized or to radio receivers in use to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.315(c) and 73.318.)	Exhibit No. E-3

15.	Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V (D). The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.	Exhibit No.
16.	Attach as an Exhibit (neee the secree) a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:	Exhibit No.
	BINGHAMTON/UTICA MAPS, SCALE 1:250,000 (a) the proposed transmitter location, and the radials along which profile graphs have been prepared;	
	(b) the 6.16 mV/m and 1 mV/m predicted contours; and	
	(c) the legal boundaries of the principal community to be served.	
17.	Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.	
	Area 2 561 sq. km. Population 263,543	
	For an application involving an auxiliary facility only, attach as an Exhibit a map (Sectional Aeronautical that of equivalent) that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:	Exhibit No. N/A
	(a) the proposed auxiliary 1 mV/m contour; and	
	(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.	
9.	Terrain and coverage data to be colculated in accordance with 47 C.F.R. Section 73.3131	
	Source of terrain data: icheck only one box below?	
	Linearly interpolated 80-second database 75 minute topographic map	
	(Source: NGDC	
ļ	Other (briefly semestize)	

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 5)

	Height of radiation center above average	Predicted Distances					
Radial bearing (degrees True)	elevation of radial from 3 to 16 km (meters)	To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)				
•	296	19.8	34.1				
o	287	19.5	33.7				
45	294	19.7	34.0				
90	219	17.0	29.4				
135	97	11.2	20.2				
180	124	12.6	22.8				
225	99	11.3	20.4				
270	226	17.2	29.9				
315	287	19.5	33.7				

^{*} Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20.	Environmental	Statement	(See 47	C.F.R.	Section 1	1.1301	et seq.	.)
-----	---------------	-----------	---------	--------	-----------	--------	---------	----

If No, explain briefly why not.

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact?	Yes X No
If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.	Exhibit No.

Please see Engineering Exhibit E-6

E-6

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed)	Relationship to Applicant (e.g., Consulting Engineer)				
Garrett G. Lysiak, P.E.	Consulting Engineer				
Signature Landt & Lyanh	Address (Include ZIP Code) Owl Engineering 1306 West County Road F, Suite 105 Arden Hills, MN 55112				
Date	Telephone No. (Include Area Code)				
January 26, 1994	(612) 631-1338				



US Department of Transportation Eastern Region

Fitzgerald Federal Building John F. Kennedy International Airport Jamaica, New York 11430

Federal Aviation

Administration ACKNOWLEDGEMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

CITY

STATE

LATITUDE/LONGITUDE MSL 43-02-14.00 075-26-40.00 1378 LATITUDE/LONGITUDE

AMSL

FARMERS MILLS

NY

1578

KENNETH F. ROSER, JR. OWL ENGINEERING, INC.

1306 W COUNTRY RD F, STE 105 ARDEN HILLS, MN 55112

AERONAUTICAL STUDY No: 92-AEA-0878-OE

Type Structure: ANTENNA TOWER 97.9 MHZ 1.65 KW ERP ONLY

The Federal Aviation Administration hereby acknowledges receipt of notice dated 05/08/92 concerning the proposed construction or alteration contained herein.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation, whether it should be marked and lighted to enhance safety in air navigation, and whether supplemental notice of start and completion of construction is required to permit timely charting and notification to airmen. The findings of that study are as follows:

The proposed construction would not exceed FAA obstruction standards and would not be a hazard to air navigation.

Obstruction marking and lighting are not necessary.

This determination expires on 12/12/92 unless application is made, (if subject to the licensing authority of the Federal Communications Commission), to the FCC before that date, or it is otherwise extended, revised or terminated.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgement will be sent to that Agency.

NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED

SIGNED

Robert P. Alexander (718) 553-1230/1228

Specialist, Systems Management Branch

ISSUED IN: Jamaica, New York

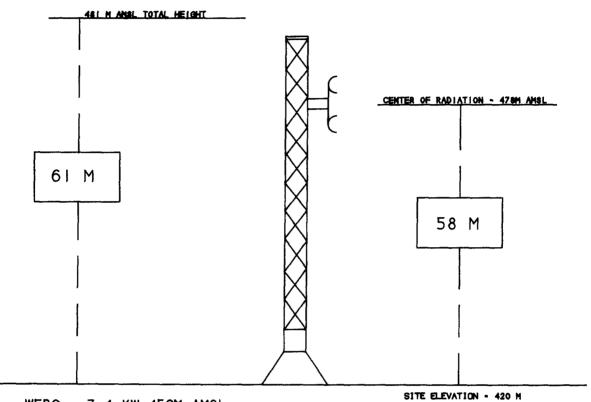
ON 06/12/92

Si he mount on Existing Tour

OWL ENGINEERING, INC.

CONSULTING COMMUNICATIONS ENGINEERS

1306 W. County Road F, St. Paul, MN 55112 (612) 631-1338 • Fax (612) 631-3502



WFRG - 7.4 KW 459M AMSL WKDY - 27 KW 472M AMSL WXFV(TV) - 42.7 KW 473M AMSL

OWL ENGINEERING. INC. ENGINEERING EXHIBIT E-2

WHITESBORO. NY NOT TO SCALE OTHER ANTENNA NOT DEPICTED

CHANNEL 250A

ENGINEERING EXHIBIT E-3 AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

PROPOSED TRANSMITTER AND STUDIO LOCATIONS

PBC proposes to operate from a site uniquely described by the geographic coordinates:

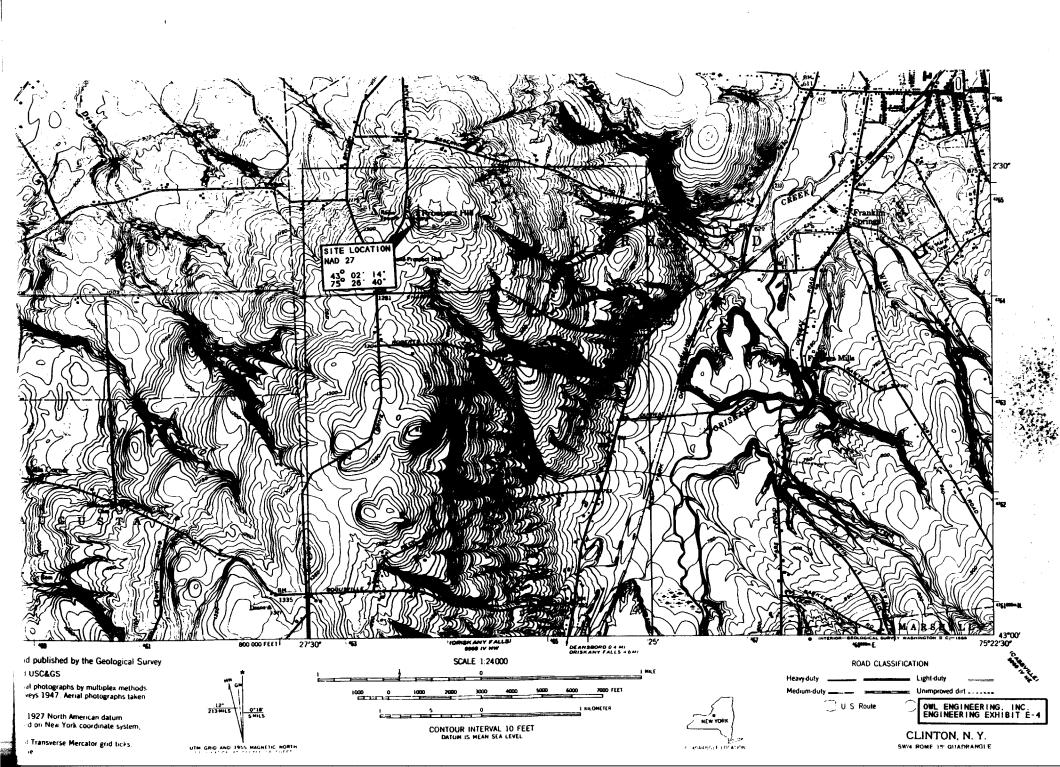
(NAD 27) 43° 02' 14" North Latitude 75° 26' 40" West Longitude

(NAD 83) 43° 02' 14" North Latitude 75° 26' 39" West Longitude

Figure E-4 is a portion of the Clinton, New York 7.5 minute U.S.G.S. topographic quadrangle map showing the proposed transmitter site. PBC proposes to co-locate with radio stations WKDY, WFRG and WFXV(TV). PBC assumes responsibility for any intermodulation or objectionable interference and will correct any such problems should they arise.

Because the area is rural, there is not expected to be any problem with blanketing interference. The applicant is aware of the provisions of Section 73.318 of the FCC's Rules and the requirement for satisfying all complaints of blanketing interference that are received within a one-year period.

The main studio for the station will be located in the WHITESBORO area, at a site yet to be determined.





ENGINEERING EXHIBIT E-6 AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS

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- 1. The site proposed is not in or near any location referenced in Section 1.1306(b)(1) as being of environmental interest.
- 2. The provisions of Section 1.1306(b)(2) relating to the use of high intensity strobe lighting does not apply since the antenna height proposed with this application does not require this form of lighting to be utilized.
- 3) Compliance to Section 1.1306(b)(3) regarding human exposure to RF radiation was examined for multiple sources. A search was made about the proposed site coordinates to locate any additional sources of RF radiation. Radio stations WKDY, WFRG and WFXV(TV) are the only other contributing sources.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS CONTINUED

The proposed antenna will be mounted on an existing tower with FM stations WKDY and WFRG. WKDY is licensed for 27KW Effective Radiated Power (ERP). WFRG is licensed for 7.4 KW ERP. In order to calculate the power density taking into account all FM sources, it will be assumed that the three radiation sources are located at the lowest antenna height and their contributions are additive for a worst case analysis. The antenna for WFRG is located nearest the ground at a height of 39 meters. The total radiated power from the three sources is 71.8 KW.

Referring to Table 1, Appendix B of OST Bulletin No. 65, and assuming a worst case analysis by using a 2 bay antenna, the minimum height required for compliance with ANSI exposure guidelines is 23.6 meters (read from the 75 KW row). Since the nearest antenna is actually 39 meters above ground, the proposed FM contribution to the ANSI limit is within guidelines.

Television station WFXV is located 53 meters above ground with 42.7 KW ERP. Utilizing equation 5 in OST Bulletin No. 65 with the values listed below, the power density can be found to be 0.315 mW/cm $_2$, or 16 percent of the ANSI limit of 1.957 mW/cm $_2$ for this frequency range.

ENGINEERING EXHIBIT FOR AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

ENVIRONMENTAL CONSIDERATIONS CONTINUED

VERP = 42.7 KW AERP = 0.22*VERP D = 53 meters pi = 3.14 F = 1 (worst case)

Adding the contributions of FM and TV fields the value should be less that 100 percent. The percentage of the FM contribution to the total field is 37 percent (the square of the ratio of the minimum height to the actual height). Adding this to the 16 percent due to the WFXV's contribution, the total exposure is 53 percent of the ANSI limit.

Access to RF circuitry will be restricted. Signs will be posted warning of the potential danger. When persons require access to the site, tower or antenna for maintanance purposes, the transmitter power will be reduced or completely eliminated to comply with ANSI guidelines. PBC will come to agreement with all licensees located at the proposed site to coordinate maintenance activities. Hence, the conditions of Section 1.1306(b)(3) would not be involved.

ENGINEERING EXHIBIT E-7 AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

CHANNEL SPACING STUDY

FM Channel 250-A

LATI	TUDE:	43 2	2' 14"	LONGITUDE:	75 2	6′40″			
CHNL	Call		City	Class		ulated Km.	Required Km.	Clear- ance	Bearing degrees
247	WYXL	FMNY	Ithaca	В		99.10	69	30.10	230.31
248	WCIZ	FMNY	Watertown	C1		107.16	75	32.16	342.56
249	WKOLFM	FMNY	Amsterdam	A	:	103.23	72	31.23	92.82
249	WKOLFM	FMNY	Amsterdam	Α	:	103.36	72	31.36	89.62
250	NEW	FMNY	Jewett	Α		123.65	115	8.65	128.71
250	WPXYFM	FMNY	Rochester	В	:	174.55	178	-3.45	274.32*
	LIC	Kiss	Limited Pa	rtner 43	8' 7'	773	5′2″	BLH9004	5KD
250		FANY	Jewett	A		121.41	115	6.41	129.89
251	WHWK	FMNY	Binghamtor	В	:	116.33	113	3.33	201.09
252	NO	CONFLI	CT						
253	NO	CONFLI	CT						

^{*} This short spaced condition is eliminated pursuant to FCC Rule Section 73.215. Please see engineering statement.

ENGINEERING EXHIBIT E-8 AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

SHORT SPACING STATEMENT

The proposed site was selected on Prospect Hill overlooking the community of Whitesboro, NY. There is an existing tower to locate on so no problems with zoning and the FAA are expected. The short spaced condition with WPXY can be eliminated utilizing contour protection.

ENGINEERING EXHIBIT E-9 AMENDMENT TO APPLICATION FOR FM CONSTRUCTION PERMIT PROFESSIONAL BROADCASTING CORPORATION WHITESBORO, NEW YORK

CHANNEL 250 1.5 KW 204 METERS

CONTOUR OVERLAP STUDY

Engineering Exhibit E-9A shows a tabulation of the protected and interfering contours for the proposed facility. Engineering Exhibit E-9B shows the tabulation of the protected and interfering contours for Radio Station WPXY. The protected contour is defined as the 60 dBu contour for the proposed operations and the 54 dBu F(50,50) contour for WPXY. The interfering contour is defined as the 34 dBu contour for the proposed operations and the 40 dBu F(50,10) contour for WPXY. The predicted distance to contours for WPXY assumed the maximum Height Above Average Terrain (HAAT) and maximum radiated power for a class B facility. Engineering Exhibits E-9C through E-9D show the plotted interfering and protected contours and demonstrate the lack of prohibited overlap. The entire 60 dBu contour for the proposed operations is shown on Engineering Exhibit E-9E.

ENGINEERING EXHIBIT 9A

PREDICTED CONTOURS, PROPOSED FACILITY

LATITUDE: 43° 02′ 14" LONGITUDE: 75° 26′ 40"

			Contour Leve	els (dBu)
AZ	HAAT	ERP		F(50,10)
(degs)	(m)	(KW)	60.0	34.0
(9-)	()	(2)		0.110
0.0	287	1.50	33.7	109.9 km.
45.0	294	1.50	34.0	110.6
90.0	219	1.50	29.4	102.8
135.0	97	1.50	20.2	86.0
180.0	124	1.50	22.8	90.5
225.0	99	1.50	20.4	86.3
226.0	102	1.50	20.8	86.9
227.0	105	1.50	21.1	87.4
228.0	109	1.50	21.5	88.1
229.0	114	1.50	22.0	88.8
230.0	119	1.50	22.4	89.7
231.0	125	1.50	22.9	90.5
232.0	130	1.50	23.2	91.3
233.0	135	1.50	23.6	92.0
234.0	139	1.50	23.9	92.6
235.0	143	1.50	24.2	93.2
236.0	146	1.50	24.4	93.6
237.0	148	1.50	24.6	93.9
238.0	150	1.50	24.7	94.2
239.0	151	1.50	24.9	94.4
240.0	153	1.50	25.0	94.6
241.0	154	1.50	25.1	94.8
242.0	156	1.50	25.2	95.0
243.0	158	1.50	25.3	95.3
244.0	160	1.50	25.5	95.5
245.0	162	1.50	25.6	95.8
246.0	163	1.50	25.7	96.0
247.0	165	1.50	25.8	96.3
248.0	167	1.50	26.0	96.5
249.0	170	1.50	26.2	96.8
250.0	172	1.50	26.3	97.2
251.0	175	1.50	26.5	97.5
Continu	ed on	next page.		